January 31, 2002

Ms. Lynn Brickett
U.S. Department of Energy
National Energy Technology Laboratory
PO Box 10940, MS 922-273C
Pittsburgh, PA 15236-0940

Dear Ms. Brickett:

Subject: JV Task 42 – Longer-Term Testing of Continuous Mercury Monitors
Cooperative Agreement No. DE-FC26-98FT40321; UND Fund 4781

Please find enclosed the October 1 – December 31, 2001, Quarterly Status Report for the subject task. This work was performed at the University of North Dakota Energy & Environmental Research Center under the subject agreement.

If you have any questions, please call me at (701) 777-5138, fax at (701) 777-5181, or e-mail at dlaudal@undeerc.org.

Sincerely,

Dennis L. Laudal
Senior Research Advisor

DLL/llh

Enclosure

c/enc: Paul Chu, EPRI

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U.S. DEPARTMENT OF ENERGY

FEDERAL ASSISTANCE PROGRAM/PROJECT STATUS REPORT

OMB Burden Disclosure Statement

1. Program/Project Identification No.	2. Program/Project Title:	3. Reporting Period
DE-FC26-98FT40321	JV Task 42 – Longer-Term Testing of Continuous Mercury Monitors	10/1/01 through 12/31/01
4. Name and Address Energy & Environmental Research Center University of North Dakota PO Box 9018, Grand Forks, ND 58202-9018		5. Program/Project Start Date 4/15/98
		6. Completion Date 3/31/03

7. Approach Changes

This work was initiated using the commercial funds from EPRI. Initial plans called for testing first at the Gavin Power Plant and then at the Sammis Power Plant, both in Ohio. However, issues with plant schedules required substituting the TXU Monticello Power Plant for Gavin, and testing at Sammis first. Serious equipment failure at Sammis resulted in the test being postponed.

The present schedule is that the TXU Monticello Power Plant near Mount Pleasant, Texas, will be tested in early February 2002. Testing at Sammis has tentatively been scheduled for March 2002, depending on plant scheduling and sampling personnel availability. At both plants, two continuous mercury monitors (CMMs) will be operated for a period of 20–30 days.

~ None

8. Performance Variances, Accomplishments, or Problems

As mentioned above, sampling was initiated at the Sammis Power Plant near East Liverpool, Ohio, which is owned by First Energy. It has seven coal-fired units and burns a blend of high- and low-sulfur butuminous coals. Testing will be done at two units, one having an electrostatic precipitator (ESP) and the other a reverse-gas baghouse (RGB). Initially, testing of the CMMs began mid-July 2001. However, during the first week of monitoring, stannous chloride backed up into the CMM, causing equipment failure. The needed repairs were so significant that work could not be resumed, requiring that the schedule be postponed. This equipment is still in the process of being repaired.

The Monticello Power Plant, owned by TXU (formerly Texas Utilities), has two units and burns a local Texas lignite. Units 1 and 2 are tangentially fired boilers rated at 593 MW each. Unit 1 is equipped with an ESP and Unit 2 with a fabric filter. Sampling will be performed there in early February 2002. Eric Chen, a Ph.D. student in Chemical Engineering from the University of Texas, will be operating the CMMs at Monticello. Prior to undertaking the work at Monticello, he will assist with sampling at Martin Lake Power Plant for another project. Energy & Environmental Research Center (EERC) sampling engineers and technicians will be present at the beginning of the Monticello project to install, calibrate, and monitor the instruments to ensure that they are working correctly. Once the EERC has established that all is working properly, Mr. Chen will operate the CMMs and download data to the EERC at least every other day. Support will be provided via telephone by the EERC during the course of the project as well as at least one on-site visit during the monitoring. Wet-chemistry analysis will be performed on-site to validate instrument data.

~ None

9. Open Items

None

10. Status Assessment and Forecast

See No. 7 above for an explanation of scheduling changes approved by DOE.

No Deviation from Plan is Expected

11. Description of Attachments

None

12. Signature of Recipient and Date	13. Signature of U.S. Department of Energy (DOE) Reviewing Representative and Date